W L Brown 1948 b

Reprinted from Journal of the New York Entomological Society, Vol. LVI. December, 1948, pages 205-208.

A NEW GENUS AND SPECIES OF ANT FROM INDIA (HYMENOPTERA: FORMICIDAE)

By Marion R. Smith

Bureau of Entomology and Plant Quarantine, Agricultural Research Administration, United States Department of Agriculture

The specimens representing the species upon which this article is based were intercepted at Honolulu, Hawaii, in an orchid shipment originating in India. In Emery's keys to the genera of the subfamily Myrmicinae (1921), in Wytsman, Genera Insectorum, Fascicule 174a, pp. 1-94, and in Wheeler's "Keys to the Genera and Subgenera of Ants" (1922), Bul. Amer. Mus. Nat. Hist., 45: 631-710, the specimens key out to a position near Lophomurmex, a genus peculiar to continental and insular India. They definitely do not belong to that genus, however, as they differ in many characters, including the following: Clypeus not perpendicular and ending in the middle of its anterior border as an obtuse projection; frontal area lacking; promesonotal suture obsolescent; petiole non-pedunculate; epinotal spines not long and acute; short legs with greatly enlarged femora and tibiae: shorter and stouter body, and presence on the petiolar node of a sharp, transverse carina. Both Horace Donisthorpe and Wm. L. Brown, Jr., have confirmed the author's opinion that the specimens belong to a new genus.

Although the species clearly belongs to the subfamily Myrmicine, its tribal position is questionable. Many, if not all, of the tribes, are largely determined by male and female characters and in this case only workers are present. Furthermore, the number of workers at hand is so small that it is impossible to be sure whether the species has monomorphic, dimorphic, or polymorphic workers.

Recently the author has seen specimens belonging to this new genus from Szechwan Province, China, with the following additional data: 5 miles north Hsin Ching, 1700 ft., 6-24-44, from trunk and roots of Ficus sp.; Schwanglin, 6-21-44, from a moist, moss-covered bank deeply shaded by bamboo. These specimens were collected by Wm. L. Brown, Jr., who is of the opinion that the arits may nest in the soil. He noted that those from the first-mentioned locality were timid and stuck tenaciously to the bark when an attempt was made to collect them. Those from the other locality, however, were rather quick in their pace. In view of the small number of workers from each locality, no attempt has been made to place them specifically.

The name proposed for the new genus is Acalama, which means "without a stalk or stem," this reference being to the non-pedmeulate petiole. The genotype bears the specific name donisthorpe in honor of the eminent formicologist, Horace Donisthorpe, of the British Museum.

Acalama, new genus.

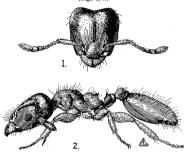
Worken.—Small, apparently monomorphic. Head (including mandibles) subcordate, with rounded posterior corners and not very deep, but distinctly emarginate posterior border. Autema 11-segmented, with a prominent 3-segmented dub, the latter much longer than the remainder of the funicality seapes short, curved basally, enlarged apically, falling by one fourth to one-third its length from reaching the posterior border of the head. Frontal carines short, well-segrated, indistinctly or not lobed, concealing antennal insertions. Frontal areas indistinct or absent. Clypeus, in profile, flattened, median region extended as a short lobe, the anterior border of which is straight or indistinctly emarginate. Eye well-developed, placed emare the anterior than the posterior border of the head, with at least 7-9 ommatidia in its greatest length. Mandible of ordinary shape, the masticator border with 2 larce apical and 3 or 4 smaller basal testor.

Thorax, in profile, flattened or weally convex. Pronotum with a distinct humeral tooth. Promesonotal suture obsolecent. Mesospinotum with a remarkably deep constriction. Epinotal spines unusually short, upwardly directed. Logs rather short, with greatly enlarged femora and tibin; not tibial spur of anterior leg well-developed, those of the middle and posterior legs vestigial or lacking. Petide non-peducueltic; naterior and posterior faces of the node declivous, the two surfaces meeting to form a sharp, transverse carina which is distinctly emarginate; ventral surface of petiolo with a tooth. Post-petiole slightly broader than long, also broader than the petiole. Gaster truncate basally, with distinct humeral angles. Genotine.—Acadama domisthornei, new species.

207

Acalama donisthorpei, new species

(Figs. 1, 2.)



Worker of Acalama donisthorpei, new species. Fig. 1, frontal view of head. Fig. 2, body in profile. (Illustrations by Arthur D. Cushman.)

Worker .- Length 2.2 mm. (holotype).

Mandibles with rather coarse, scattered, pillgerous punctures. Clypeous with a few, fine, longitudinal rugules interspecaed with minute punctulations. Checks and much of the front of the head with numerous, fine, longitudinal rugules, which in some lights, at least, give these regions a subopaque appearance. Posterior part of head with scattered but distinct punctures. Dornal surface of epinotum punctulate, also with very fine, indistinct, longitudinal rugulas. Poşterior part of head, legs, and gaster more shingir than the remainder of body.

Hairs yellowish or grayish according to the light, simple, moderately abundant, variable in length, apparently longest and most abundant on gaster.

Body brown, gaster darker.

Type locality.-Sikkim, Province of Assam, India.

Described from the holotype and 21 paratype workers collected at Honolulu, Hawaii, April 14, 1947 by T. F. Chong, of the Division of Foreign Plant Quarantines, Bureau of Entomology and Plant Quarantine, United States Department of Agriculture. The ants were found "in or on" an orchid plant, Dendrobium moschafum Wall, the shipment of which originated at the locality mentioned above. The holotype and paratype specimens, which bear U. S. National Museum No. 58660, have been placed in the United States National Museum

One paratype is slightly smaller than the holotype, measuring 2 mm. in length.